



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/748,297

12/31/2003

Jun-Young Lim

0630-1903P

8434

2292

7590

09/27/2006

BIRCH STEWART KOLASCH & BIRCH

PO BOX 747

FALLS CHURCH, VA 22040-0747

EXAMINER

TILL, TERRENCE R

ART UNIT

PAPER NUMBER

1744

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,297	<b>Applicant(s)</b> LIM ET AL.	
	<b>Examiner</b> Terrence R. Till	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 4 and 6-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/06, 6/06, 7/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION*****Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-3, 5, and 10-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 6-8 of copending Application No. 10/748,295 in view of European publication to Yagi et al. (EP-0 786 228- cited in IDS). Copending application 10/748,295 discloses, verbatim all the claimed subject matter of the present application with exception of a resonance unit for resonating the reciprocating rotation of the agitator driving unit. The publication to Yagi et al. discloses (figures 14-16) an agitator 205 rotatably installed inside the suction port, a plurality of brushes 205e being arranged on the agitator in the length direction; an agitator driving unit 204e-g for driving the agitator to perform reciprocating rotation in a predetermined angle range; and a spiral spring resonance unit 204f for resonating the reciprocating rotation of the agitator driving unit. It would have been

Art Unit: 1744

obvious to a person skilled in the art at the time the invention was made to provide a resonance unit to the agitator driving unit of the '295 application to help restore the agitator to a previous, at rest, position.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by European publication to Yagi et al. (EP-0 786 228- cited in IDS).

5. The publication to Yagi et al. discloses a suction head for a vacuum cleaner, comprising: a casing 101 having a suction port 102 for sucking alien substances from the floor; an agitator 205 rotatably installed inside the suction port, brushes 205e being arranged on the agitator in the length direction; and an agitator driving unit 204e-g for driving the agitator to perform reciprocating rotation in a predetermined angle range and a spiral spring resonance unit 204f for resonating the reciprocating rotation of the agitator driving unit. One end is fixed to the motor shaft of the driving motor, and another end is fixed to the driving motor or the casing. Yagi et al. also discloses a driving motor 204e for generating a driving force; and a driving force transmitting unit 204b for transforming rotation of the driving motor into rotation of the agitator, so that the agitator can perform reciprocating rotation in the forward/backward direction in the predetermined angle range. Yagi et al. is considered to additionally disclose the brushes are

Art Unit: 1744

evenly arranged at regular intervals, in the length direction of the agitator (see figure 5, 105b) and a suction nozzle installed inside the casing (defined by casing and suction port), for collecting the alien substances sucked from the suction port, a volume of which being reduced from the suction port to the opposite side.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1744

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over European publication to Yagi et al. (EP-0 786 228- cited in IDS).

10. Yagi et al. discloses the claimed invention except for brushes that are arranged in a plurality of rows in the length direction of the agitator. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the agitator of Yagi et al. to have brushes are arranged in a plurality of rows in the length direction of the agitator, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Allowable Subject Matter***

11. Claims 4 and 6-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

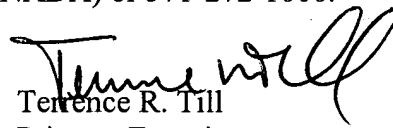
13. The patents to Brasty, Novinger, Lynch, Witt, Johansson, Cyphert et al. and Dance show the current state of the art in oscillatory driven brushes in vacuum cleaner nozzles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrence R. Till whose telephone number is (571) 272-1280. The examiner can normally be reached on Mon. through Thurs. and every other Friday.

Art Unit: 1744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys P. Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Terrence R. Till  
Primary Examiner  
Art Unit 1744

trt